


REMARKS

Early and favorable consideration with respect to this application is respectfully requested.

Should any questions arise in connection with this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: 
Iurie A. Schwartz
Registration No. 43,909

P.O. Box 1404
Alexandria, VA 22313-1404
(703) 836-6620

Date: August 21, 2001

027650-945

Attachment to Preliminary Amendment dated August 21, 2001

Marked-up Claims 1-6.

1. (Amended) A method of manufacturing a packaging material laminate of web form [which comprises] comprising at least a printing ink outer layer, an aluminum vapor deposition film layer containing linear low density polyethylene obtained by a polymerization using metallocene catalyst, a polyethylene-extrusion lamination layer, and a carrier layer of paper or paper substitution material, according to following steps[;]:

a step of vapor-depositing aluminum on one side of the web form film containing the linear low density polyethylene obtained by the polymerization using the metallocene catalyst,

a step of winding up temporarily the [aluminium] aluminum vapor deposition film containing the linear low density polyethylene obtained by the polymerization using the metallocene catalyst in a reel form, making direct contact between the [aluminium] aluminum vapor deposition surface and the film surface containing the linear low density polyethylene, and keeping the reel [in] for a predetermined time,

a step of unwinding the [aluminium] aluminum vapor deposition film from the kept reel, applying a fused lamination resin by extrusion lamination by fused polyethylene between the vapor deposition surface of an [aluminium] aluminum vapor deposition film

Attachment to Preliminary Amendment dated August 21, 2001

Marked-up Claims 1-6.

layer and the surface of the carrier layer, and laminating the [aluminium] aluminum vapor deposition film layer and the carrier layer and,

a step of forming an ink layer in the external surface of the outside of the laminate by printing simultaneously, before and after the above-mentioned steps.

2. (Amended) The method of manufacturing [of] the packaging material laminate according to claim 1 wherein the carrier layer is laminated, without coating anchor-coat material in the carrier layer just before the step of laminating the [aluminium] aluminum vapor deposition film layer and the carrier layer.

3. (Amended) A laminate for packaging material containing a printing ink layer, [the 1st aluminium] a first aluminum vapor deposition polyethylene layer obtained by vapor depositing [aluminium] aluminum to linear low density polyethylene obtained by a polymerization using metallocene catalyst, a carrier layer of paper or paper substitution material, and [the 2nd aluminium] a second aluminum vapor deposition polyethylene layer obtained by vapor depositing [aluminium] aluminum in linear low

Attachment to Preliminary Amendment dated August 21, 2001

Marked-up Claims 1-6.

density polyethylene obtained by a polymerization using metallocene catalyst, and being constituted in order of the laminating,

[characterized by that] wherein

[the] said printing ink layer is laminated to the polyethylene layer side of [the 1st aluminium] said first aluminum vapor deposition polyethylene layer,

[the] said carrier layer of paper or paper substitution material is laminated through a polyethylene-extrusion lamination layer to the [aluminium] aluminum vapor deposition layer side of [the 1st aluminium] the first aluminum vapor deposition polyethylene layer, and

[the] said carrier layer of paper or paper substitution material is laminated through a polyethylene-extrusion lamination layer to the [aluminium] aluminum vapor deposition layer side of [the 2nd aluminium] the second aluminum vapor deposition polyethylene layer.

4. (Amended) A laminate for packaging material containing a printing ink layer, an [aluminium] aluminum vapor deposition polyethylene layer obtained by [aluminium] aluminum vapor deposit to linear low density polyethylene obtained by a

Attachment to Preliminary Amendment dated August 21, 2001

Marked-up Claims 1-6.

polymerization using metallocene catalyst, a carrier layer of paper or paper substitution material, and a polyolefin inner layer and, being constituted in order of the lamination, [characterized in that] wherein

the printing ink layer is laminated to the polyethylene layer side of the [aluminium] aluminum vapor deposition polyethylene layer,

the carrier layer of paper or paper substitution material is laminated through a polyethylene-extrusion lamination layer to the [aluminium] aluminum vapor deposition layer side of the [aluminium] aluminum vapor deposition polyethylene layer.

5. (Amended) A laminate for packaging material which comprises a printing ink layer, a polyolefin outer layer, a carrier layer of paper or paper substitution material, and an [aluminium] aluminum vapor deposition polyethylene layer obtained by [aluminium] aluminum vapor deposit to linear low density polyethylene obtained by polymerization using metallocene catalyst, and is constituted in order of the lamination, [characterized by that] wherein

Attachment to Preliminary Amendment dated August 21, 2001

Marked-up Claims 1-6.

[the] said carrier layer of paper or paper substitution material is laminated through a polyethylene-extrusion lamination layer to the [aluminium] aluminum vapor deposition layer side of the [aluminium] aluminum vapor deposition polyethylene layer.

6. (Amended) Laminate for packaging material of [any claim of Claims 3-5] Claim 3, wherein any anchor-coat material is not coated on the carrier layer surface in the lamination structure between the [aluminium] aluminum vapor deposition film layer and the carrier layer.

ABSTRACT OF THE DISCLOSURE

A packaging material laminate [comprises] includes at least a printing ink outer layer, an aluminum vapor deposition film layer containing linear low density polyethylene obtained by a polymerization using metallocene catalyst, a polyethylene-extrusion lamination layer, and a carrier layer of paper or paper substitution material. The method of manufacturing [comprises] includes the steps of vapor-depositing aluminum on one side of the web film containing linear low density polyethylene obtained by the polymerization using metallocene catalyst, winding up the aluminum vapor deposition film temporarily in a reel form, making direct contact between the aluminum vapor deposition surface and the film surface containing a linear low density polyethylene, keeping the reel in predetermined time, unwinding the aluminum vapor deposition film from the kept reel, applying a fused lamination resin by the extrusion lamination by fused polyethylene, between the vapor deposition surface of the aluminum vapor deposition film layer and the surface of the barrier layer, laminating the aluminum vapor deposition film layer and the carrier layer, forming an ink layer in the appearance surface of the outside of the laminate by printing.

ABSTRACT OF THE DISCLOSURE

A packaging material laminate includes at least a printing ink outer layer, an aluminum vapor deposition film layer containing linear low density polyethylene obtained by a polymerization using metallocene catalyst, a polyethylene-extrusion lamination layer, and a carrier layer of paper or paper substitution material. The method of manufacturing includes the steps of vapor-depositing aluminum on one side of the web film containing linear low density polyethylene obtained by the polymerization using metallocene catalyst, winding up the aluminum vapor deposition film temporarily in a reel form, making direct contact between the aluminum vapor deposition surface and the film surface containing a linear low density polyethylene, keeping the reel in predetermined time, unwinding the aluminum vapor deposition film from the kept reel, applying a fused lamination resin by the extrusion lamination by fused polyethylene, between the vapor deposition surface of the aluminum vapor deposition film layer and the surface of the barrier layer, laminating the aluminum vapor deposition film layer and the carrier layer, forming an ink layer in the appearance surface of the outside of the laminate by printing.

09913959-121701